

DETAILED ACTION

Acknowledgement of Receipt

Applicant's Response, filed 12/22/2009, in reply to the Office Action mailed 6/29/2009, is acknowledged and has been entered. Claim 1 has been amended. Claim 5 has been cancelled. Claims 1-4 and 6-11 are readable upon the elected invention and are examined herein on the merits for patentability.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 1/13/2010 was filed after the mailing date of the Office Action on 6/29/2009. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Response to Arguments

Applicant's arguments have been fully considered but they are not persuasive for reasons set forth hereinbelow.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-4 and 6-11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement, for reasons set forth in the previous Office Action.

Applicant argues on pages 6-7 of the Response that the Office's objections are directed to a substrate compound in general, while the instant claims require that the substrate also include imaging nuclei. Applicant contends that the claims are not directed to "any" unsaturated compounds, but to unsaturated compounds comprising imaging nuclei, and that given the examples in the instant application that one of ordinary skill would know how to select an unsaturated substrate compound based on the desired contrast agent.

This is not found to be persuasive. The limitation that the compounds include an "imaging nuclei" is clear. For example, any given unsaturated bond would reasonably include a carbon atom, therefore at least would include natural abundance ^{13}C as an imaging nuclei. The nature of the hydrogenatable, unsaturated substrate compound itself that is to be suitable for use as a contrast agent remains unclear based on the limited disclosure of a few specific compounds in the examples and mention to a WO document or US equivalent for other suitable compounds which may be suitable, which does not appear to be a clear incorporation by reference.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 and 6-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Barkenmeyer *et al.* (*J. Magnetic Resonance*, 1996, p. 129-132), for reasons set forth in the previous Office Action.

Applicant argues on pages 7-8 of the Response that claim 1 has been amended to a method for producing MR contrast agents wherein hydrogenation of a substrate, to form a hydrogenated contrast agent, takes place at the same time as the contrast agent is exposed to an oscillating magnetic field in combination with a stationary magnetic field. Applicant asserts that Barkenmeyer discloses methods for transferring polarization generated by parahydrogen induced polarization to heteronuclei such as ^{13}C , and that Barkenmeyer describes applying oscillating magnetic field in the presence of stationary magnetic field, but does so after hydrogenation to polarize ^{13}C . Applicant asserts that Barkenmeyer is not directed to a method for producing contrast agents.

This is not found to be persuasive. Barkenmeyer specifically recites "heteronuclear polarization transfer using selective pulses during hydrogenation with parahydrogen" (title); ^{13}C -NMR spectra obtained during hydrogenation of phenylacetylene to styrene with parahydrogen, starting with an E-BURP-2 pulse on M and generating a signal from the ^{13}C nucleus directly bound to A (Figure 2); and ^{13}C -NMR spectra obtained during hydrogenation of 1-hexyne with parahydrogen, starting with a selective pulse on proton A, followed by selective DEPT (Figure 3). It is noted that the recitation of the intended use of the substrate compound as a contrast agent has

not been given patentable weight to distinguish over Barkenmeyer because the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Since Barkenmeyer discloses compounds that are the same as those claimed (i.e. a hydrogenatable, unsaturated substrate compound) they would be capable of performing the intended use, as claimed.

Conclusion

No claims are allowed at this time.

Although Applicant's arguments as set forth in the aforementioned Response have been fully considered, they are deemed unpersuasive. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leah Schlientz whose telephone number is (571)272-9928. The examiner can normally be reached on Monday-Tuesday and Thursday-Friday 9 AM-5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hartley can be reached on 571-272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael G. Hartley/
Supervisory Patent Examiner, Art Unit 1618

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